



Flood Recovery Bulletin



Valuable information to assist you through the days ahead

Published by the Virginia Department of Emergency Management

Tips for post-flood sanitation and hygiene

After a flood, the physical devastation to a community is obvious. It is critical to practice basic hygiene during this emergency period to keep you and your family safe.

General Guidelines



Always wash your hands with soap and water that has been boiled or disinfected before preparing or eating food,

after toilet use, after helping in flood cleanup and after handling articles contaminated with floodwater or sewage.

Avoid eating or drinking anything contaminated by floodwater. Don't allow your children to play in floodwater areas, and wash their hands frequently.

Disinfect your children's toys with a solution of one cup bleach in five gallons of water. Small children, pregnant women and people with health problems should avoid flooded areas until clean-up operations are completed.

Report health hazards. Tell the health department about animal carcasses, rats, dangerous chemicals and other hazards on your property.

Be patient with your family, your neighbors, government agencies and members of volunteer organizations. Remember that many are in the same situation, and it may take time for emergency response agencies to provide services to everyone.

Mold, Mud and Mildew

The mud left behind by floodwaters may contain health hazards. It is very important to get rid of this mud as soon as possible and to use care when doing so.

Protect your eyes, mouth and hands. When cleaning, wear rubber gloves and, if possible, a face mask. Use a soap containing disinfectants to wash your hands when you're done.



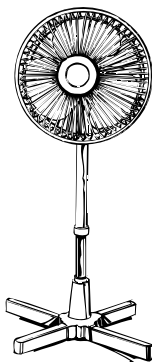
To remove mold and mildew:

- Brush mold/mildew growth off of household items outdoors to prevent scattering of spores in the house.
- Vacuum floors, ceilings and walls to remove mildew. Then wash surfaces with a detergent/household cleaner and water solution. Rinse well.
- Wipe mildew-stained areas with a cloth dampened with a solution of chlorine bleach, or disinfectant, or one cup rubbing or denatured alcohol to one gallon water.

Dry thoroughly.

To prevent mildew growth, use an air conditioner, dehumidifier or heater, if available, to remove moisture.

Use fans to circulate air, and open all windows. Turn on electric lights in closets, and leave doors open to dry out the dampness and humidity.



Spray surfaces with a fungicide or other mildew preventative product. Dry thoroughly.

A solution of one part household bleach and four parts water will kill surface mildew and, if used as part of a regular maintenance program, will prevent mildew from returning.

Water Supply Safety

If you are unsure about the safety of your water supply, use it only to hose your home or to flush your toilet. Buy bottled water for drinking if you can.

Sometimes large water storage tanks called "water buffaloes" are brought to communities that need clean water. They are filled with clean drinking water from places outside your area and are towed to your community, often by National Guard or U.S. military personnel.

A "boil order" may be issued in your community. If such an order has been issued, do the following:



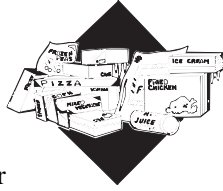
1. Fill a large pot with water from the tap.
2. Strain the water through cheese cloth, a sheet, a coffee filter or other clean, porous material to remove as many solids as you can.
3. Bring the water to a rolling boil and keep it boiling for at least 10 minutes.
4. Let water cool. When it is cool, add eight drops of unscented liquid chlorine bleach for each gallon of water. Let the water stand for a half hour. If it gives off a slight chlorine smell and looks clear, it's OK to use.
5. Pour the water back and forth between two clean pots. This will add air to the water and make it taste better.

If you do not smell chlorine or if the water is still cloudy, add another eight drops liquid chlorine bleach and let it stand for another half hour. If you smell chlorine,

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Guidelines for handling food after the flood

Contaminated food may be a problem following any storm involving flooding. Floodwaters may carry silt, raw sewage, oil or hazardous chemical wastes. The harmful bacteria and filth in floodwater will contaminate food, making it unsafe to eat.



Inspect any food left in the house after a flood. Floodwater may have covered it, dripped on it or seeped into it. Even though some foods are protected by their containers, if you are in doubt about the safety of a food, throw it out rather than risk disease.

Remember, **“When in doubt, throw it out!”** Use the following guidelines when deciding which foods to discard and which to save.

Discard:

- Opened containers and packages.
- Unopened jars and bottles with paper seals such as those containing mayonnaise or salad dressing.

- Containers of spices, seasonings and flavorings.
- Flour, sugar and coffee in canisters with non-sealed, fitted lids.
- Paper, foil, cellophane, cloth, fiber or cardboard boxes — even if the contents seem dry. This includes salt, cereals, pasta products, rice and any “sealed” packages of crackers or cookies within a larger paper box.
- Dented, bulging or leaking canned goods. Seams on these cans may have been weakened or their seals broken, causing contamination or spoilage.
- All fresh vegetables and fruits.
- Fresh meat, fish, poultry and eggs.
- Home canned foods, even if the jar seems tightly sealed.

Undamaged commercially canned goods are safe if you wash and sanitize containers before use. For added safety, boil food before using.

Wash and sanitize containers before opening. To wash and sanitize cans:

- Remove labels first because they can harbor harmful bacteria.
- Wash cans in a strong detergent solution with a scrub brush.
- Immerse scrubbed containers for 15 minutes in a chlorine solution of two teaspoons chlorine bleach per quart of room-temperature water.
- Remove containers from solution, and air-dry before opening. Use as soon as possible, since containers may rust.
- Mark the contents on the can with a permanent ink marker.
- Cook food thoroughly before it is eaten.

For infants, use only pre-prepared, canned baby formula that doesn’t require added water, unless you are absolutely sure your water is safe to drink.

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it’s OK to use. If you have added bleach twice and the water still does not smell like chlorine, don’t use it for drinking or cooking.

Make sure that any water you use has been tested and approved by the water supplier or health department.

Water pumped from wells that have been submerged by floodwater should be disinfected before being used for drinking, cooking or for washing cooking utensils.

If a well is flooded, check for silt accumulation inside the well. If the water is cloudy, the system should be flushed until the water clears. Then the interior of the well and pumping equipment should be disinfected with a strong chlorine solution.

If there are no specific instructions from your local health department, follow these steps to purify your well and water.

- Open your faucets to pump the

water out of your well. Let them run for at least 15 minutes or until you lose pressure.

- Pour one quart of liquid chlorine bleach in the well and leave it for at least four hours. **Do not use any water during this time.**
- Open all the faucets and let them run until you smell chlorine at **each** faucet.
- Turn off the faucets and let the water sit in the pipes for two to four hours. **Do not use any water during this time.**
- Flush out the system by running the taps until you can no longer taste or smell the chlorine.
- Have your local health department test a sample of water from your well to ensure it is safe to drink.

Be cautious when hiring contractors

As you work to restore your home, you may want to call a contractor for help. Be aware that dishonest contractors may try to take advantage of you.

Be especially alert for door-to-door solicitors who ask for large cash deposits or for entire payments in advance. You may find that the work is never performed or the down payment is never returned.

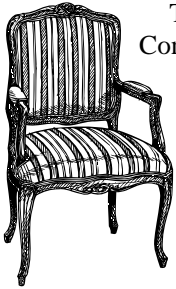
Get a written estimate from the contractor before you sign a contract or make down payments. Beware of offers that seem too good to refuse. Ask for references and check with your friends, neighbors and relatives before deciding which contractor to choose.

If you have been victimized or are concerned about people representing themselves as contractors, contact: Virginia Department of Professional and Occupational Regulation’s Enforcement Division at (804) 367-8504; Virginia Department of Agriculture and Consumer Services’ Office of Consumer Protection at (804) 786-2042 or your local Better Business Bureau.



Much of the information used in this publication is taken from the book, “Repairing Your Flooded Home,” published by the American Red Cross and the Federal Emergency Management Agency. To order, call your local American Red Cross chapter or check their Web site at www.redcross.org.

Caring for damaged family heirlooms and valuables



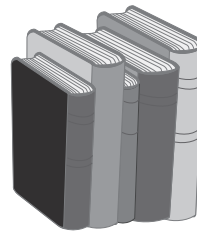
The American Institute for Conservation of Historic and Artistic Works (AIC) and the National Institute for the Conservation of Cultural Property (NIC) have developed the following information for homeowners regarding the recovery of water-damaged belongings.

Ten tips for the homeowner:

- Clean off dry silt and debris from your belongings with soft brushes or dab with damp cloths without grinding debris into objects.
- If the object is still wet, rinse with clear, clean water or a fine hose spray.
- Air-dry objects indoors if possible. Sunlight and heat may dry certain materials too quickly, causing splits, warpage and buckling.
- The best way to inhibit growth of mold and mildew is to reduce humidity. Increase air flow with fans, open windows, air conditioners and dehumidifiers.
- Remove heavy deposits of mold growth from walls, baseboards, floors and other household surfaces with commercially available disinfectants.
- If objects are broken or begin to fall apart, place all broken pieces, bits of

veneer and detached parts in clearly labeled open containers. Do not attempt to repair objects until completely dry or, in the case of important materials, until you have consulted with a professional conservator.

- Documents, books, photographs and works of art on paper may be extremely fragile when wet; use caution when handling. If possible, take prints and paper objects out of mats and frames or free their edges. Prints and paper objects should be allowed to air-dry. Rinse mud off wet photographs with clear water, but do not touch surfaces. Sodden books and papers should also be air-dried, or may be kept in a refrigerator or freezer until they can be treated by a professional conservator.
- Textiles, leather and other "organic" materials will also be severely affected by exposure to water and should be allowed to air-dry.
- Remove wet paintings from the frame but not from the stretcher. Air-dry, face up, away from direct sunlight.
- Furniture finishes and painted



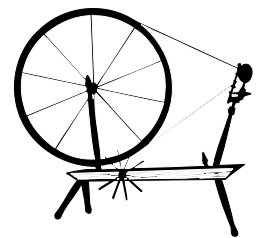
surfaces may develop a white haze or bloom from contact with water and humidity. These problems do not require immediate attention. Consult a professional conservator for treatment.

- Rinse metal objects exposed to water, mud or silt with clear water and dry immediately with a clean, soft cloth. Allow heavy mud deposits on large metal objects to dry. Caked mud can be removed later. Consult a professional conservator for further treatment.

As this information is general in nature, AIC and NIC strongly recommend that professional conservators be consulted about the appropriate method of treatment for historic objects.

Professional conservators may be contacted through the free **Conservation Services Referral System** of the **American Institute for Conservation of Historic and Artistic Works**, 1717 K Street, NW, Suite 301, Washington, D.C., 20006; (202) 452-9545.

Other reference materials and resources are available online from the AIC Web site at <http://aic.stanford.edu/disaster>.



Replacing important documents takes time and patience

Replacing important documents that were irretrievably damaged or lost during a flood takes time and patience.



Items such as driver's licenses, birth certificates, social security cards, land deeds, car titles, banking documents and credit cards will involve calling different federal and state agencies and private businesses.

Elderly or disabled people who need to replace their Medicare cards can call the Social Security Administration's toll-free number, and a customer representative will

take care of this over the phone.

If you or your children need to replace social security cards, one of the agency's local offices can issue your new cards. Some kind of identification is needed.

The Social Security Administration will accept proof of identity in the form of report cards, doctor's records, school records, paycheck stubs, banking statements, military discharge papers and other kinds of documentation.

Any of the Virginia Department of Motor Vehicles branch offices across the state can replace your driver's license and car titles.

The Virginia Department of Health's

State Office of Vital Records and Health Statistics has birth certificates and marriage licenses. You must call this state agency at (804) 662-6200 to obtain these documents.

Land deeds and other records related to land ownership are stored at your local county or city courthouse.

For credit card and banking concerns, your local bank will be able to handle your requests for information. They will work with you to obtain the replacement documents you need.

The most important thing to remember is that this process takes more than a couple of days to complete. Allow for this and give yourself a realistic amount of time to accomplish these tasks.

Be wary of chemical hazards

When you are returning to areas damaged by recent flooding, the Environmental Protection Agency (EPA) advises extreme caution.

Be aware of potential chemical hazards you may encounter during repair and recovery efforts.

Floodwaters may have buried or moved hazardous chemical containers of solvents or other industrial chemicals from their normal storage places.

Do not attempt to remove any propane tanks. These represent a very real danger of fire or explosion, and the EPA urges you to call police or fire departments to report locations.

Car batteries may contain an electrical charge. You should wear insulated gloves when removing car batteries and avoid coming in contact with any acid that may have spilled.

The debris left behind by the flood can be a source of injury or illness. It is important to be careful when cleaning damaged structures or handling debris. Here are



some safety tips:

- Always wear gloves and work boots.
- Hazardous materials need to be separated from other trash.
- Always wash your hands after any cleanup.
- Treat electrical lines and outlets with extreme care. **Don't assume power is off!**

Check the water heater for any flood-related damages

Check your water heater.

If floodwaters got into the gas burner, electrical parts or insulation, it should be replaced.

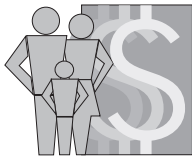
If you want to save it, have it cleaned and re-started by a professional.

If it was not flooded, be sure to flush clean water through it before you wash dishes or clothes with hot water.



Check on financial assistance opportunities

Volunteer organizations such as the American Red Cross, The Salvation Army and religious groups offer a variety of assistance options.



These groups can help with medical aid, counseling and with securing necessary items for you and your family such as clothing and groceries.

If the president declares your community a disaster area, you may be eligible for certain kinds of federal and state aid. Check local television, radio and newspapers to see if your community has been declared.

A toll-free registration number will be publicized for you to make application for disaster assistance over the phone. If your area has been or will be declared a major disaster area by the president, one or more Disaster Recovery Centers (DRCs) may be opened.

At these centers, you can acquire the necessary information to assist your family with basic financial recovery. Your local television, radio and newspapers will have the locations of the DRCs and the hours of operation.



Protect your home and family against future disasters

If your home is damaged by floodwater, federal disaster aid to help you repair it is available only if a presidential disaster declaration has been made. Then you must apply for individual assistance and have that approved in order to receive aid.

The National Flood Insurance Program (NFIP) offers policies that protect homes, condominiums and nonresidential buildings, including farm and commercial structures in participating communities, from flood-related damage.

Flood insurance claims are paid even if a disaster is not declared by the president. There is separate contents coverage, so renters can get flood insurance, too.

You can buy flood insurance no matter where you live — in high, low or moderate risk areas — as long as your community participates in the NFIP.

Contact your local insurance agent or call **1-800-427-4661** to check to see if your community is part of the NFIP program or to learn more about the NFIP.



For flood insurance claims, make sure you provide some photographs or a videotape of the damage to the inside and outside of your home.

Separate your damaged and undamaged belongings. If possible, find receipts, cancelled checks or proofs of purchase for high-cost items, such as appliances, you plan to claim.



This flood recovery information has been brought to you by the Virginia Department of Emergency Management (VDEM).

Questions or comments may be directed to the VDEM Public Affairs Office at (804) 897-6510 or by e-mail at pio@vdem.state.va.us. For

more information, visit the VDEM Web site at www.vaemergency.com.

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